

Prognostic Mapping of Radioactive Contamination Fields Formed in the Past

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Abstract—New data are obtained on cesium 137 contamination after the Chernobyl NPP accident of settlements, agricultural lands, and forest areas in four Russian regions most affected by the accident: the Bryansk, Kaluga, Orel, and Tula regions. The new information was used to qualify the database on radioactive contamination of these areas. The renewed database was used as a basis for compiling maps on the terrain contamination by cesium 137 in 2006 and a series of prognostic maps with a ten-year interval from 2016 to 2056. The assessment of the dynamics of a change in the zonal areas with different levels of contamination by cesium 137 and the time when the patterns of respective contamination levels disappear in these areas is specified.

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